The Maryland Fruit Grower

Published Monthly by the Maryland State Horticultural Society

Edited by the Secretary, A. F. Vierheller, Extension Horticulturist

Volume 10 **June-July, 1940** **No. 6-7**

CHARLES PHILLIP CLOSE

Following an illness of several months, Charles Phillip Close passed away at his home in College Park, Maryland, at the age of 72 years. Mr. Close was prominent in horticultural developments, having been on the faculties and research staffs of several Universities, including Delaware and Maryland. For many years he was Extension Horticulturist for the U. S. Department of Agriculture, retiring about two years ago. The Close apple, one of his horticultural creations, was named for him. Mr. Close was secretary of the Maryland State Horticultural Society in 1907-1908-1909, also secretary of the American Society for Horticultural Science for many years, and was active in development of the American Pomological Society. Horticulture has lost a worthy worker and hosts of friends will miss his fine companionship.

THINNING OF FRUIT

This is a necessary, rather costly and somewhat dreaded orchard practice. Very few fruit growers doubt the wisdom of thinning. It gives us a chance to govern our production as regards quantity and allows us to cull out the fruit early, without having to pick it, haul it in, grade it and build up a costly and sometimes tempting cull pile. It allows us to add size to fruit and to ease tree loads, preventing breakage, and there is evidence that it affects annual bearing to some extent, if done early enough. In apple thinning, Dr. Magness found that about 40 to 50 good leaves should be allowed per fruit. Now Dr. Cullinan of the U. S. Department of Agriculture states that 30 to 40 leaves are necessary to produce a good peach. These results rather upset the older spacing methods, but leave a lot to the judgment of the growers. In a way, they still emphasize the old advice to thin off all fruit considered excessive, then thin off some more to be sure. Sufficient leaf area adds to color, flavor, and size of fruit. Time of thinning is important. The sooner apples are thinned, the more energies will be released for development of the fruit that is set, as well as for fruit bud formation and added tree growth. Dr. Cullinan, speaking before the Indiana Horticultural Society, January, 1940, reported that his work showed that thinning of such early peach varieties as Mayflower, Early Rose, Early Wheeler, Greensboro, Cumberland, Golden Jubilee, Carman, and Eclipse before the June drop, has increased the size of fruits during the first "swell," resulting in greatly increased final size. Shoot growth and leaf size have shown increase also. He found that cost of thinning at such an early time was more than later thinning of larger fruits, and stated that the grower must judge whether such cost was justifiable, although it would be difficult to figure the wisdom of this cost expenditure for one season only. Probably over a period of years it might show its benefit or fault. With Elberta, Cullinan found that

if the crop is heavy, thinning just as early as possible gave best results. Where the set was not too heavy, and a good June drop occurred, thinning during the second phase of peach growth (pit hardening stage) gave beneficial size to fruit. Of course, in any discussion of thinning, it must be remembered that variety, tree vigor, soil moisture, fertilizer practices, and spraying must be considered as adding their effects to the final effects of fruit thinning.

In 1939, A. F. Vierheller, working in 9 year old peach trees, tried several methods of thinning as follows:

Elberta-clubbing off fruits with a short piece of spray hose, 835 fruit were removed in 35 minutes. An awkward method, and hand-thinning would have been faster.

Elberta-jarred limbs with a heavy mallet padded with burlap, 126 fruits were jarred off, 20 of which would have fallen anyway, the tree was then hand-thinned, and 501 fruits removed in 30 minutes. The tree was not heavily set, and much time was lost in climbing around, during thinning.

Elberta-hand-thinned. In 20 minutes 378 fruits were removed.

The results were not obtained, as the pickers mixed the fruit from these trees. However, they stated that they knew when they picked the thinned trees as the fruit was larger, better-colored, and less pickings were required to strip the crop from these trees. The thinning time would likely have been much less if ladders had been used. There is much variation in the number of fruits removed in certain time, due to tree differences.

In some seasons which are especially favorable, increased size of peaches may not result from thinning, *but* thinning in any year is good insurance to avoid small, unmarketable size, tree breakage, etc.

HAIL INSURANCE

Some growers are insurance-minded and some are not. Hail has visited some Maryland orchards with no uncertain results, but there were broad smiles where the damage was covered by insurance. Look over the ad in this issue.

COMMERCIAL APPLE PRODUCTION ESTIMATE

A new system of estimating commercial apple production will be used this year. It is the hope that growers in the sections receiving estimate blanks will take time to fill out the blanks as accurately as possible, for only then will the estimates mean anything. Please cooperate. The following remarks by Mr. C. E. Burkhead, Agricultural Statistician for Maryland and Delaware, explains the new system to be used. Read this:

"The first estimate of the commercial apple production for the 1940 season will be released August 9th at 3 P. M., E. S. T. with the August General Crop Report. The estimate will refer to the outlook as of August 1. Along with the commercial estimate for 1940 will be shown the figures for the year 1939. Estimates will not be released on *total* production of apples produced by States and the Nation as a whole. The new series of commercial apple estimates will cover production in *commercial* areas only and will pertain to 35 states. The principal commercial apple producing areas in Maryland are located in the following counties: Allegany, Carroll, Cecil,

Frederick, Harford, Montgomery, Talbot, Washington, and Worcester. In Delaware the principal commercial producing areas are located in Kent and Sussex Counties. Considerable study has been given to the selection of commercial apple producing areas. In Maryland both State and Federal authorities have collaborated in this study.

"As usual much reliance will have to be placed on commercial growers themselves in furnishing information based on their knowledge of conditions in their respective localities during the crop marketing season. Continued cooperation of commercial growers is expected. It is anticipated that this new series of commercial apple estimates will be the most comprehensive yet undertaken by the United States Department of Agriculture. The series will not be comparable with commercial apple estimates now available prior to 1939. The Agricultural Marketing Service will release production in commercial areas in the very near future covering a series of years, prior to 1939."

POISON IVY CONTROL

This plant has become a real pest in many orchards. Last year A. F. Vierheller, Extension Horticulturist, tried the following materials under apple trees with no apparent injury to the trees: "Atlacide"-Chipman Chemical Company, Bound Brook, New Jersey; "Vegecide"-Reade Manufacturing Company, Jersey City, New Jersey, and "Triox"-California Spray-Chemical Corporation, Elizabeth, New Jersey. All of them were effective, but it seemed that the plants formed new leaves after a time. Recent examination of these plants has shown that the ivy is now practically killed out. There are a few sprigs living that were missed in spraying, but if followed up, now, with another spraying, the results should be 100% kill. It would take a very little material to do it. The cost of material (1 pound per gallon of water and about one gallon per tree) is about eight to ten cents per tree, not counting labor, etc. It may be applied with a spray pump at about 75 pounds pressure, and try to get it to the roots of the ivy. However, it seems to wash down to the roots, as the material applied in the tests was applied with a small compressed air pump, and the results were very good. The material may be applied in June or July. Write A. F. Vierheller, College Park, Maryland, for details.

APPALACHIAN APPLES

It is time for the annual sign-up of growers toward support of organized advertising. Appalachian Apples, a grower-controlled plan, serving Maryland, Virginia, Pennsylvania, and West Virginia, has had a busy year, their work being with grocers, with distributors, with the public, and with the growers. On request, 48,702 complete "display sets" were sent to grocers in 22 states, Maryland grocers using 3,570 of these sets. Baltimore Independent Grocers Association was called together with about 300 attendance, and apple sales were discussed. The 1940 Grocer's Apple Book, the only one of its kind, was gladly received by growers and used in their sales methods.

The work with distributors consisted of personal visits to brokers, wholesalers, commission men, and jobbers, giving them display material,

and any kind of helpful suggestions (and receiving their suggestions) for improving the apple deal. The public was reached through the Apple Receipe Book, a very attractive publication. Eighteen large Eastern and Southern daily papers are using three apple recipes monthly, with pictures. Several papers have run a special Sunday rotogravure section on apples, and there is also an attractive colored movie with sound; eighteen of these reels are being used constantly by schools, clubs, etc. The growers are being served through many ways, such as assistance in package standards, legislation, help in the cull problem, and the bulletin which gives some short paragraphs regarding the industry and trade.

At the National Apple Institute meeting at Rochester, it was surprising to see that Appalachian Apples was regarded as among the best advertising set-ups. Results are showing. Although a lot of apples moved as Federal Surplus purchases, the apple deal, through usual channels, was a good one this year. That means that the advertising work helped to move a lot of apples, and best of all, the grocers admit that they have pushed apples hard and have made money on them, all because they were urged to do it, told how to do it, and were furnished with some ammunition to tell the public that apples are good to eat. The export trade is gone. We must sell many more apples at home. Advertising will help a lot. Have you subscribed for 1940? Do it now. Write Appalachian Apples Incorporated, Martinsburg, West Virginia, for details.

THE FRUIT OUTLOOK

In November, 1939, issue of The Agricultural Situation, issued by Bureau of Agricultural Economics, U. S. Department of Agriculture, Mr. R. Royston gives an analysis of the fruit outlook. Since this article was written, the British government has stopped importation of canned fruits from the United States, and the fresh apple exports to that country have practically stopped. The article follows:

"Domestic demand conditions and the export situation are of major importance in the outlook for fruits during the coming year.

Consumer demand for fruits in this country is expected to be somewhat higher than during the past season. This will mean an increase in domestic outlet for the larger supplies available from the 1939 harvests. Supplies of apples, pears, grapes, and citrus fruits for market during the first half of 1940 are relatively large. The total pack of canned fruits also is heavier than a year ago, and large supplies of dried fruits are available. But larger supplies of fruits also are available this year in the major importing countries. This fact, along with war conditions in Europe is expected to offset largely the effect of the anticipated increase in consumer purchasing power in the United States.

Canada and Europe have relatively large supplies of fruits. The average-to-large crops produced in Europe have tended to restrict imports during the early months of the season. This situation has been particularly unfavorable for apple exports from the United States and Canada. In addition, it appears that exports may be restricted further by an unfavorable exchange rate with Great Britain and by the fact that import licenses are now required by the British Government for all fresh, canned, and dried fruit except fresh apples, pears, bananas, oranges, grapefruit, limes, and

HAIL!

A Threatening Villain

Hail is a villain you can't prevent, can't fight, can't stop. This villain steals into your orchard and robs you of everything, right before your eyes. Months of planning, hoping, and toil disappear as you watch. You haven't a chance unless you have taken the one precaution—insurance.

Insurance is your only weapon against hail. It is your chance to reap a harvest out of disaster. Hail may ruin your fruit, but insurance will save your credit rating.

Place your hail insurance with one of the listed old-line Stock Companies. You will receive many advantages, among which are:

1—Absolute security and safety, for the Hail Department represents the combined strength of twelve of America's leading companies.
2—The assurance that a specialist is serving you—an organization that knows hail insurance.
3—Claims adjusted after fruit reaches sufficient growth to apply standard grades. Losses paid immediately after adjustment.
4—Adjusters who are experts, Men who make fruit their life study; their carreer. Men who are well-know agriculturists, and are leaders in their field.
5—The knowledge that you are doing business with the largest hail insurance underwriters in the country. Where fair dealings, honest adjustments, and courteous treatment are the first consideration. Ask the growers who insure with us!
6—A Hail Insurance program designed for your individual needs.

Aetna Insurance Company
World Fire and Marine Insurance Co.
Piedmont Fire Insurance Co.
Insurance Company of North America
Alliance Insurance Company
Philadelphia Fire & Marine Insurance Co.
National Security Fire Insurance Co.
Central Fire Insurance Co.
Springfield Fire & Marine Insurance Co.
Sentinel Fire Insurance Company
Michigan Fire & Marine Insurance Co.
New England Fire Insurance Company

See your LOCAL AGENT representing one of the listed companies, or write direct to

G. L. BOOKER, Superintendent

HAIL DEPARTMENT

90 John Street **New York, N. Y.**

lemons. It seems almost certain that some foreign markets for our fruit and fruit products will be closed and that others may restrict imports because of the scarcity of shipping space and the necessity of conserving exchange.

Approximately 10 percent of the United States apple and pear crops of 1938 was exported. Such is not likely to be the case this season. Exports of fresh apples, pears, and grapes probably will be considerably smaller. Exports of the citrus fruits, however, may not be affected so much, because a large part of these exports usually goes to Canada.

About two-fifths of the United States dried-fruit production of 1938 was exported. But this season, with large supplies of dried fruits available, export prospects are unfavorable. The United Kingdom, the most important foreign market for dried fruit, has placed in operation a number of import-control measures which, for the present at least, will curtail imports from the United States. This situation may be changed somewhat if the United Kingdom finds it difficult to obtain supplies from the Mediterranean countries and from Australia and South Africa. Our shipments of dried fruit to central Europe and the Baltic States may be negligible. Exports to Scandinavian countries, which have increased sharply in recent years, probably will be curtailed because of naval operations in the North Sea.

The acreage of fruit crops to be harvested next year is already "planted." And for most of these crops changes in bearing acreage are gradual and occur over a period of several years. The outlook for fruit growers, therefore, involves long-time as well as short-time consideration. The average combined production of all fruits during the next 5 years (1940-44) probably will be larger than the average for the 5-year period 1934-38. Production in 1939 was well above the 1934-1938 average.

During the next 5 years significant increases are expected in the production of grapefruit, oranges, and lemons. Moderate increases are anticipated for peaches, pears, and cherries, and grape production probably will increase slightly. The trend in apple production is expected to continue downward at a moderate rate. No significant changes are expected to occur in the production of other fruits.

Total volume of fruit production during the five seasons, 1934-38 averaged about two-fifths larger than that of the 5-year period 1919-23. The rate of increase for all fruits combined during the past 20 years, as measured by the 5-year averages, has been fairly uniform. The trend of apple production has been moderately downward, while orange production has more than doubled and is now exceeded only by apples. The grapefruit crop has increased to nearly four times the 1919-23 average, and lemon production has almost doubled. Significant increases also have taken place in the production of grapes, pears, apricots, strawberries, cherries, and plums and prunes.

The annual average per capita *production* of the 13 major fruits increased from 176 pounds for the 5-year period 1919-23 to 207 pounds during 1934-38. The per capita production of apples declined 20 percent during this period, whereas that of all citrus fruits doubled. Cherries, pears, plums and prunes, olives, and apricots increased materially in per capita production over the same period; strawberries increased rapidly during the middle of the period but are now only slightly higher than in 1919-23. Present indications are that during the next 5 seasons a larger per capita supply will be comprised of citrus fruits.

Per capita *consumption* in the United States has tended to follow the

trend in production, and that of fresh and canned fruits has increased materially during the past 20 years. But the per capita consumption of dried fruits has decreased slightly during the past decade. Per capita consumption of fresh fruits increased from the average of 131 pounds in 1919-23 to 150 pounds in 1934-38 and that of canned fruits increased from 9.3 to 15.4 pounds. Per capita consumption of dried fruits decreased from 6.2 pounds in 1919-23 to 5.8 pounds in 1934-38.

As with other agricultural commodities, variations in prices received by producers of fruits are associated rather closely with variations in the two factors, total supply and consumer income. In relation to the 1924-29 level of fruit production and prices, the recent (1934-38) average production of all fruits combined is 18 percent higher, whereas the index of prices received for all fruits is 39 percent lower. The index of prices received for all farm products (1934-38 average) is about 28 below the 1924-29 level.

During this period prices of grapefruit, oranges, cherries, pears, and dried prunes decreased more than prices of other fruits. Prices of grapefruit and oranges decreased 62 and 54 percent, respectively; cherries, 50 percent; pears, 48 percent; dried prunes, 44 percent; grapes, 36 percent; apples, 31 percent; strawberries, 30 percent; peaches, 26 percent; apricots, 25 percent; olives, 20 percent; and plums and fresh prunes, 18 percent. The 1934-38 average of cranberry prices was the same as the 1924-29 average.

The influence of consumer income on fruit prices in recent years has probably been of more importance than variations in supplies of fruit.

WHAT'S THIS?

The U. S. Bureau of Entomology and Plant Quarantine has found that if Japanese beetle traps are painted yellow, instead of the present green color, a catch of 50 percent more beetles may be expected. It all began when various manufacturers sold traps of various shades of green. In a test of these various green color effects on attracting the beetles, other colors were included, and the use of yellow color in any type of paint seemed to add to attractiveness for beetles. A color known as primary yellow seemed much better than traps colored either green or white or a combination of these colors. This yellow color is much deeper than lemon yellow, and is close to "June butter" color. Some Maryland growers know from experience that the Japanese beetle is fond of Yellow Transparent apples.

A NEW PLANTING

Last year, Harrison's Nurseries set out a 226 acre block of Elberta trees, one-year budded, 6 to 7 foot size, 7/8 to 1 inch caliper. These trees are showing excellent growth, and show considerable advantage over smaller trees set in the same block.

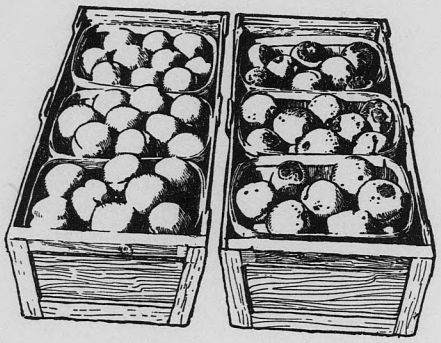
After knocking the man down, the lady stepped from her car and said, "I'm so sorry. You should watch where you walk. I am an experienced driver. I've been driving a car for two years, now."

"Well, said the victim, "I ain't no push-over; I've been walkin for fifty-seven years."

"Alice has decided to marry a struggling fruit-grower."

"Well, if Alice has decided, he might as well stop struggling."

Don't Let Brown Rot Rob Your Peach Profits



Use This Simple Picking Time Spray

You can protect your peaches from the tremendous losses through decay or partial decay, before they reach the market.

This harmless spray improves the appearance and keeping quality of your fruit for days longer on the fruit stand or en route to market. Thousands of dollars are saved annually by those who know the value of this inexpensive spray.

It places a film of pure colliodal sulfur just where you need it, underneath the fuzz against the skin of the peach. When dry, it is odorless, tasteless, invisible and harmless, and cannot be washed or brushed off. Dusting sulfur is not only unsightly but does not give this protection.

Spray the day before picking, or while picking, with ½ gallon Sulfocide and 1½ lbs. of any good odorless soap, to 100 gallons of water.

This spray protects in the same way, plums, cherries, berries, also tomatoes and grapes. Ask for descriptive literature. Address Dept. "F".

B. G. PRATT COMPANY

50 Church Street :-: New York, N. Y.